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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/423,572	11/29/1999	RALF TIMMERMANN	MO-5366/LEA3	6913
75	90 02/19/2003			
MARC J. FARRELL REED SMITH LLP 213 MARKET STREET, 9TH FLOOR			EXAMINER	
			COLE, ELIZABETH M	
P.O BOX 11844 HARRISBURG, PA 17108-1844			ART UNIT	PAPER NUMBER
	,		1771	17
			DATE MAILED: 02/19/2003	<i>\( \)</i>

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
_	09/423,572	TIMMERMANN ET AL.
Office Action Summary	Examiner	Art Unit
	Elizabeth M Cole	1771
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet v	vith the correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a replained in the provision of the pr	.136(a). In no event, however, may a ply within the statutory minimum of th I will apply and will expire SIX (6) MC te. cause the application to become A	reply be timely filed irty (30) days will be considered timely. NTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).
1) Responsive to communication(s) filed on 10	December 2002	
.—	his action is non-final.	
3) Since this application is in condition for allow closed in accordance with the practice unde	vance except for formal m r <i>Ex parte Quayle</i> , 1935 C	atters, prosecution as to the merits is C.D. 11, 453 O.G. 213.
Disposition of Claims		
4) Claim(s) 1-5 and 8-17 is/are pending in the a		
4a) Of the above claim(s) is/are withdra	awn from consideration.	
5) Claim(s) is/are allowed.		
6)  Claim(s) <u>1-5, 8-17</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and Application Papers	or election requirement.	
9) The specification is objected to by the Examir	ner.	
10) The drawing(s) filed on is/are: a) acc	epted or b) objected to by	the Examiner.
Applicant may not request that any objection to	the drawing(s) be held in abo	yance. See 37 CFR 1.85(a).
11)☐ The proposed drawing correction filed on	is: a)□ approved b)□	disapproved by the Examiner.
If approved, corrected drawings are required in i	reply to this Office action.	
12)☐ The oath or declaration is objected to by the E	Examiner.	
Priority under 35 U.S.C. §§ 119 and 120		
13) Acknowledgment is made of a claim for forei	gn priority under 35 U.S.C	;, § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:		
1. Certified copies of the priority docume		
2. Certified copies of the priority docume		
<ul><li>3. Copies of the certified copies of the prapplication from the International E</li><li>* See the attached detailed Office action for a limit</li></ul>	Bureau (PCT Rule 17.2(a)	).
14) Acknowledgment is made of a claim for dome:	stic priority under 35 U.S.0	C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language p 15)☐ Acknowledgment is made of a claim for dome	provisional application has	been received.
Attachment(s)		
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice	w Summary (PTO-413) Paper No(s) of Informal Patent Application (PTO-152)
S. Patent and Trademark Office		

- 1. Claims 1-5, 8-17 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification as originally filed does not teach that the interpenetration of the fibers forms pores.
- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 1,3-5,10, 16-17 rejected under 35 U.S.C. 103(a) as being unpatentable over JP 07-125128 A to So et al in view of WO 96/19599 to Lorcks et al. (equivalent to U.S. 6,218,321).

  So et al discloses a material comprising a first ply of natural fibers and a second ply of biodegradable fibers such as aliphatic polyesters. So et al discloses that the basis weight of the natural fiber nonwoven layer may be 30-200 grams per meter squared. See page 4, paragraph 0015. So et al discloses that the basis weight of the biodegradable nonwoven layer may be 10-70 grams per meter squared. See page 3, paragraph 0011. The natural fibers may comprise hemp fibers. See page 4, paragraph 0012. The material may be formed into bags. See page 8, last line. The recitation that the material comprises a coffee or tea bag has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481

(CCPA 1951). So et al differs from the claimed invention because So et al does not teach that the structure should have pores. Lorcks et al teaches at col. 7, line 54 - col. 8, line 45 and col. 8, line 66 - col. 9, line 13, that fabrics comprising both biodegradable polymers and natural fibers can be formed into a variety of materials. Those materials include wipes, protective garments, sacks and agricultural fabrics such as those discussed in So et al at paragraph 0001, page 1, as well as filters and other permeable materials. Therefore, Lorcks et al teaches that the type of fabric disclosed in So et al is also suitable for use for making porous or permeable materials. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the material of So et al so that it comprised pores. One of ordinary skill in the art would have been motivated to form the fabric so that it comprised pores. One of ordinary skill in the art would have been motivated to incorporate pores into the So et al fabric because Lorcks et al teaches that these types of fabrics are also suitable for making filters and other permeable materials. It further would have been obvious to have selected the degree of permeability which would produce the desired filtration properties in the filter material through the process of routine experimentation since the filtration properties are known to be related to the pore size in a filter.

4. Claims 8-9, 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over So et al in view of Lorcks et al as applied to claims 1.3-5.10, 16-17, and further in view of Pophusen et al, U.S. Patent No. 5,928,739. So et al discloses a material as set forth above. So et al differs from the claimed invention because So et al teaches that the biodegradable material may comprise an aliphatic polyester, but does not teach the other biodegradable materials set forth in claims 8-9 and 11-15. Pophusen et al teaches that along with aliphatic polyesters, the other biodegradable materials set forth in claims 8-9 and 11-15 are known to be useful in forming nonwoven materials which are biodegradable. See col. 3, lines 23-32. Therefore, it would have been obvious to one

of ordinary skill in the art at the time the invention was made to have employed the biodegradable materials of claims 8-9 and 11-15 to form the biodegradable nonwoven of So et al because Pophusen et al teaches that such materials are known to be equivalent to the aliphatic polyesters disclosed by So et al for the purpose of forming biodegradable nonwoven fabrics.

5. Applicant's arguments filed 12/10/02 have been fully considered but they are not persuasive. With regard to the 112 1st paragraph rejection. Applicant argues that the specification clearly teaches the interfiber penetration of the two layers. However, teaching interfiber penetration of the two layers is not the same as teaching that pores are formed by the interfiber penetration. Pores may be formed by a variety of means in a multi ply material, including by needling, hydro-entangling, slitting or puncturing, stretching, heating in order to remove fugitive fibers, etc. The specification does not teach that the pores are formed by interpenetration of the thermoplastic fibers and the natural fibers. The passages cited by Applicant refer to the interpenetration of the thermoplastic fibers and natural fibers and the presence of pores in the filter material, respectively, but do not disclose that the interpenetration of the thermoplastic fibers and natural fibers form the pores. Therefore, this rejection has been maintained.

With regard to the art rejection, Applicant states that the Examiner cannot refuse to give patentable weight to the limitation the "said ply containing natural fibers and said ply containing biodegradable, thermoplastic fibers are connected by interpenetration of said thermoplastic fibers and said natural fibers to form pores." However, since this limitation was specifically addressed in the Office Action mailed, 6/10/02, this argument is not clear. Additionally, the arguments regarding the fact that the prior art does not anticipate the claimed invention have been considered but are most since the prior art rejection set forth in the previous rejection was made under 35

U.S.C. 103(a), not 35 U.S.C. 102.

With regard to the combination of So et al in view of Lorcks et al. Applicant argues that the examiner has not set forth a sufficient motivation to combine the teachings of So et al with Lorcks et al. Applicant asserts that since the word "filter" only appears on three occasions in the Lorcks reference, that this cannot rise to the level of a teaching. However, Lorcks et al teaches that fabrics comprising both biodegradable polymer fibers and natural fibers can be formed into a variety of materials, including bags, wipes, as well as permeable materials such as filters. Although Applicant asserts that "the Examiner's rejection under 112 above would seem to indicate that the disclosure of something as being useful as a filter material does not equate with the disclosure of a material that includes pores". However, the 112 1st paragraph rejection does not state that the specification does not teach a material having pores, but rather, that the particular structure of the pores, (i.e., that they are formed by the interpenetration of the fibers), is not disclosed. As set forth above, pores can be formed by cutting, puncturing, stretching, etc. This issue is separate and distinct from the teaching of the Lorcks reference which teaches forming a fabric comprising both biodegradable polymeric fibers and natural fibers into a porous material such a filter.

Applicant argues that the combination of references is inapposite because the Lorcks reference is classified in class 442 while the instantly claimed invention would be classified as a paper in class 162. However, the instantly claimed invention is classified in class 442/327, 413. 414, 416. Applicant's claims are directed to an article, not a method of making, and are not directed to a paper, but are directed to a multi-ply fiber containing material. Additionally, the prior art references are both from the same field of endeavor and are both directed to articles which comprise biodegradable and natural fibers. The So et al and Lorcks references are

analogous art. The argument that one seeking to make a filter would not look to the Lorcks "fabric" reference is rebutted by the fact that Lorcks clearly teaches making filters from the combination of biodegradable and natural fibers.

With regard to the combination of So in view of Lorcks and further in view of Pophusen.

Applicant argues that Pophusen et al does not disclose a filter material or a material which would be useful as a filter material, but instead teaches a dense, almost waterproof material. However, Pophusen is not relied on as teaching a filter, but is instead relied on for the specifics regarding the biodegradable polymeric fibers. Therefore, this rejection has been maintained.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1 136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (703) 308-0037. The examiner may be reached between 6:30 AM and 5:00 PM Monday through Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (703) 308-2414.

Inquiries of a general nature may be directed to the Group Receptionist whose telephone number is (703) 308-0661.

The fax number for official faxes is (703) 872-9310. The fax number for official after final faxes is (703) 872-9311. The fax number for unofficial faxes is (703) 305-5436.

Elizabeth M. Cole Primary Examiner Art Unit 1771

e.m.c

February 10, 2003